

REMARKS/ARGUMENTS

In the Office Action mailed February 5, 2008, claims 1-9 and 20-35 were rejected. In response, Applicant hereby requests reconsideration of the application in view of the below-provided remarks. No claims are amended, added, or canceled.

Claim Rejections under 35 U.S.C. § 102/103

Claims 1-9 and 20-35 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chase et al. (“Dynamic virtual clusters in a grid site manager,” hereinafter Chase) in view of Fu et al. (“SHARP: An Architecture for Secure Resource Peering,” hereinafter Fu). However, Applicant respectfully submits that these claims are patentable over Chase and Fu for the reasons provided below.

Claims 1-9

Applicant respectfully submits that claim 1 is patentable over the combination of cited references because the combination of Chase and Fu does not teach all of the limitations of the claim. Claim 1 recites “a policy module configured to access one of a plurality of system policies, each of the plurality of system policies corresponding to an operational control parameter of a system resource of the grid computing system, wherein the plurality of system policies comprises a system prediction policy” (emphasis added).

The Office Action recognizes that Chase fails to teach a system prediction policy. Hence, the Office Action relies on Fu as purportedly teaching a system prediction policy. However, Fu also fails to teach a system prediction policy, for the following reasons.

In general, Fu is directed toward a framework, referred to as Secure Highly Available Resource Peering (SHARP), for distributed resource management, resource control, and resource sharing across sites in an Internet-scale computing infrastructure. Fu, Abstract; Introduction, paragraph 6. More specifically, SHARP uses a system of claims, separated into tickets and leases, which allow coordinated resource management within the distributed computing infrastructure. Fu, Abstract.

One of the objectives of SHARP, generally, is to provide relatively more predictability in the availability of performance resources within the distributed

computing infrastructure. Fu, Introduction, paragraph 4. Nevertheless, the stated need for predictable behavior within the distributed computing infrastructure is insufficient to teach an actual system prediction policy, as recited in the claim of the present application. In particular, the general references predictability (Introduction, paragraph 2), predictable performance (Section 2.3, paragraph 2; Section 4, paragraph 1), and predictable behavior (Introduction, paragraph 4), as set forth in Fu, do not provide a sufficient basis to support the Office Action's assertion of a teaching of a system prediction policy because these general references are not specifically directed to any type of policy which might be implemented within the distributed computing infrastructure. More specifically, these general references to predictability do not teach any type of policy, or rule, used within the SHARP framework for resource management of a distributed computing infrastructure. Similarly, the explanation that users have little basis to predict the available resources (Introduction, paragraph 2) merely describes a problem identified with conventional distributed computing infrastructures, but does not describe any type of system prediction policy for use with the described SHARP implementation.

Moreover, while Fu describes a process for oversubscription of resources, referenced in the Office Action, the described oversubscription process also fails to teach a system prediction policy. In general, Fu explains that a SHARP agent may oversubscribe its resources by issuing more tickets than it can support from the resource claims that it holds. Fu, Section 2.2, paragraph 1. However, this oversubscription process merely refers to the relationship of how many tickets are issued by a SHARP agent relative to the available resources of the SHARP agent. Fu also describes the probabilistic and accountable characteristics of the oversubscription process, but none of these characteristics address a prediction policy because there is no described predictability associated with the oversubscription process. Furthermore, none of these characteristics describe or implement an actual policy, of any kind, related to predictability of the distributed computing infrastructure. In fact, the process of allowing oversubscription of resources by issuing more tickets than a SHARP agent can support introduces more unpredictability into the distributed computing infrastructure because it is unclear whether each oversubscribe claim might be granted or rejected. While this increased unpredictability may be beneficial to resource utilization within the distributed

computing infrastructure (Fu, Section 2.2, paragraph 1), the oversubscription process nevertheless increases the unpredictability of resource claim processing. Thus, even if the SHARP agents were to implement some type of policies related to the oversubscription process, such policies should not be designated as system prediction policies because the oversubscription process increases the unpredictability of the distributed computing infrastructure, rather than addressing predictability within the distributed computing infrastructure.

Applicant further submits the Office Action's assertion regarding "anticipation" of resource use appears to mischaracterize the description provided in Section 2.2 of Fu. As explained above, Section 2.2 describes the oversubscription process, but there is no description of the oversubscription process facilitating anticipation of resource use. At best, the oversubscription process facilitates best-effort service to process oversubscribed tickets. Fu, Section 2.2, paragraph 4. However, the description of such best-effort service is insufficient to teach a system prediction policy, as recited in claim, because there is no predictability facilitated by the best-effort service to process oversubscribed tickets. Moreover, a word search of the entire document of Fu reveals that Fu does not explicitly described any type of "anticipation" in relation to the SHARP framework.

Therefore, for at least the reasons described above, the combination of cited references does not teach all of the limitations of the claim because Fu does not teach a system prediction policy. More specifically, the general references to predictability are insufficient to specifically teach a system prediction policy. Also, the described oversubscription process fails to implement or teach any type of system prediction policy. Accordingly, Applicant respectfully submits claim 1 is patentable over the combination of cited references because Fu does not teach all of the limitations of the claim.

Given that claims 2-9 depend from and incorporate all of the limitations of independent claim 1, which is patentable over the cited references, Applicant respectfully submits dependent claims 2-9 are also patentable over the cited references based on an allowable base claim. Additionally, each of claims 2-9 may be allowable for further reasons. Accordingly, Applicant requests that the rejection of claims 1-9 under 35 U.S.C. § 103(a) be withdrawn.

Claims 20-35

Applicant respectfully asserts independent claims 20, 23, 24, and 30 are patentable over the combination of cited references at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, each of claims 20, 23, 24, and 30 recites “a system prediction policy.” Here, although the language of claims 20, 23, 24, and 30 differs from the language of claim 1, and the scope of each of claims 20, 23, 24, and 30 should be interpreted independently of claim 1, Applicant respectfully asserts that the remarks provided above in regard to the rejection of claim 1 also apply to the rejections of claims 20, 23, 24, and 30. Accordingly, Applicant respectfully asserts claims 20, 23, 24, and 30 are patentable over the combination of cited references because Fu does not teach a system prediction policy.

Given that claims 21, 22, and 25-29 depend from and incorporate all of the limitations of the corresponding independent claims 20 and 24, which are patentable over the cited reference, Applicant respectfully submits that dependent claims 21, 22, and 25-29 are also patentable over the cited reference based on allowable base claims. Additionally, each of claims 21, 22, and 25-29 may be allowable for further reasons. Accordingly, Applicant requests that the rejections of claims 20-30 under 35 U.S.C. § 103(a) be withdrawn.

CONCLUSION

Applicant respectfully requests reconsideration of the claims in view of the remarks made herein. A notice of allowance is earnestly solicited. If the Examiner believes a telephone interview would expedite the prosecution of this application, the Examiner is invited to contact the attorney listed below

Respectfully submitted,

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